Amendments to the Claims

Claims 1-20 (canceled).

21. (currently amended) An improved process for the esterification of a carboxylic acid with an olefin wherein the improvement comprises contacting said carboxylic acid with a catalytic porous microcomposite comprising perfluorinated ion-exchange polymer with pendant sulfonic and/or carboxylic acid groups entrapped within and highly dispersed throughout a network of metal oxide, wherein the weight percentage of perfluorinated ion-exchange polymer in the microcomposite is from about 0.1 to about 90 percent, and wherein the size of the pores in the microcomposite is about 0.5 nm to about 75 nm~~, and wherein the microcomposite optionally further comprises pores having a size in the range of about 75 nm to about 1000 nm~~.

22. (original) The process of Claim 21 wherein the carboxylic acid is acetic acid and the olefin is cyclohexene.

23. (original) The process of Claim 21 wherein the perfluorinated ion-exchange polymer contains pendant sulfonic acid groups and the metal oxide is silica, alumina, titania, germania, zirconia, alumino-silicate, zirconyl-silicate, chromic oxide and/or iron oxide.

24. (currently amended) The process of Claim ~~23~~ 57 wherein the metal oxide is silica ~~and said microcomposite further comprises pores having a size in the range of about 75 nm to about 1000 nm~~.

Claims 25-56 (canceled).

57. (new) The process of Claim 21 wherein the microcomposite further comprises pores having a size in the range of about 75 nm to about 1000 nm.

58. (new) The process of Claim 24 wherein the perfluorinated ion-exchange polymer has about 6.3 tetrafluoroethylene molecules for every perfluoro(3,6-dioxa-4-methyl-7-octenesulfonyl fluoride) molecule and has an equivalent weight of about 1070.